# U.S. ARMY CORPS OF ENGINEERS WASHINGTON, D.C. 20314-1000



CEMP-M/CERM-P (415)

26 March, 2003

#### MEMORANDUM FOR COMMANDERS, MAJOR SUBORDINATE COMMMANDS

SUBJECT: Clarification of USACE Policy on Planning and Design (P&D), Construction Supervision and Administration (S&A) and Post-Award Engineering and Design Services (DDC)

- 1. References: a. Memorandums CEMP-MD/CEMP-EE dated 14 Oct 1998 and CEMP-MA dated 6 Feb 01, subject: Post Award Engineering Services
- b. ER 5-1-11, 27 September 2001, Program and Project Management
- c. Draft ER 415-1-16, 16 September 1999, Construction Fiscal Management
- d. ER 415-1-10, Contractor Submittals for Approval
- e. ER 37-345-10, Accounting and Reporting Military Activities
- 2. Engineering and design services during construction (DDC) are an essential part of the delivery of quality facilities for our customers. However, prior guidance regarding the funding and cost of this critical function is not consistently applied and/or is misunderstood by both Corps personnel and our customers. In addition, customers have not been adequately informed of the requirement, purpose and extent of these post-award engineering costs. In some cases this lack of communication has served to undermine the Corps' credibility and customer relationships.
- 3. Our customers have made it clear that they are concerned about high Corps costs and the many 'surprise' funding requests for DDC, particularly for construction shop drawing submittals requiring Corps approval. Many believe they have already paid for the Corps' cost of review and approval as part of the design or S&A flat rate. Further, they have said that our processes need to do more to maximize contractor responsibility to deliver complete designs, quality construction materials and products and eliminate unforeseen customer costs.
- 4. In addition, current practices of using S&A funds for pre-construction contract award activities by construction personnel must cease. Planning and design (P&D) funds must be used for all pre-award activities up to and including the award of the construction contract. The Corps must maintain accountability of our design and construction processes and avoid any perception of supplementing funding for one process from another.
- 5. In view of the above, the current policy on post-award engineering services, reference 1.a., is rescinded and replaced by the Construction Supervision (S&A) and Post-Award Engineering and Design (DDC) Policy at Enclosure 1. This policy clarification is in full compliance with

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the Corps' Project Management Business Process (PMBP) and ER 5-1-11. The policy provides clarification and guidance on functions to be charged to P&D for pre-award activities and S&A and DDC for post award activities. Further, the policy supercedes and/or supplements all existing policies and regulations relating to P&D, S&A and DDC charging practices. Draft ER 415-1-16 will be finalized and appropriate revisions made to ER 415-1-10, ER 37-345-10 and other pertinent regulations, as necessary, to reflect these changes. In addition, the 'S&A Green Book' published in 1996 titled "What is Construction S&A?...." is hereby rescinded.

- 6. The clarification of policy and functions in Enclosure 1 must be fully implemented in order to improve management performance and customer satisfaction. HQ will monitor implementation through the Command Staff Inspection (CSI) process and provide periodic feedback on progress and best construction business practices being implemented as a result of the guidance. MSC Commanders are tasked to establish procedures to implement, monitor and enforce appropriate P&D, S&A and DDC charging practices reflected herein.
- 7. By clarifying S&A and DDC charging practices, there may be a shift in charges to S&A from DDC. Therefore, MSCs will be allowed to draw on the MILCON and O&M S&A accounts in a reasonable manner during the remainder of FY03. However, justification will be required if the S&A draw appears to be excessive. CEMP-M, CERM-P and CECW-E will jointly monitor the S&A account balances and field staffing and recommend any adjustments to the S&A rates, as required, based on the combined P&D, S&A and DDC impacts.
- 8. As always, the Corps' goal is to provide our customers the highest quality products through innovative and evolving management techniques, such as PMBP, that will increase efficiency and effectiveness and customer awareness. The Corps and our customers will benefit from this policy clarification. You are encouraged to engage in a personal dialogue with your customers to elaborate n the policy clarifications.
- 9. HQ points of contact for this action are Mr. Phil Pinol, CEMP-MP, 202-761-1321, Mr. Phil Blount, CERM-P, 202-761-1267.

FOR THE COMMANDER:

Encl

STEPHEN COAKLEY

Director of Resource

Management

Major General

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All District Commanders

# CEMP-M/CECW-E/CERM-P

Clarification of USACE Policy on Planning and Design (P&D), Construction Supervision and Administration (S&A) and Post-Award Engineering and Design Services (DDC)

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CEMP-M/CERM-P 26 March 2003

# USACE Policy for Planning and Design (P&D), Construction Supervision and Administration (S&A) and Post-Award Engineering and Design (DDC) Services

#### 1. References:

- a. Memorandum CEMP-M/CERM-P dated 26 March 2002, Subject: Clarification of USACE Policy on Planning and Design (P&D), Construction Supervision and Administration (S&A) and Post-Award Engineering and Design Services (DDC)
- b. ER 5-1-11, 27 September 2001, Program and Project Management
- c. DoD Financial Management Regulation, Volume 3, Chapter 7, dated December 1996.
- d. ER 37-345-10, Accounting and Reporting Military Activities
- e. ER 415-1-16, 16 September 1999 (Draft), Construction Fiscal Management
- f. ER 415-1-10, Contractor Submittals for Approval
- g. Appendix A Additional Routine S&A Functions, 2 December 2002
- 2. General: This policy is intended to provide clarification and guidance on P&D, S&A and DDC functions, charging practices and the implementation of the Corps' Project Management Business Process (PMBP) as relates to construction activities. Reference 1.a is hereby rescinded. Draft ER 415-1-16 will be finalized in the near future and appropriate revisions will be made to ER 415-1-10, ER 37-345-10 and other pertinent regulations, as necessary, to reflect this policy.
- 3. Project Management Plan (PMP) and Budget:
- a. The principles of the Corps PMBP initiative contained in ER 5-1-11 will be followed. Upon authorization and/or acceptance of a project, a project manager (PM) will be assigned in accordance with local procedures and form a project delivery team (PDT), to include the customer's representative. The PDT, led by the project manager (PM), will develop a Project Management Plan (PMP) and will budget for all phases of the project through fiscal closeout based on project authorization and requirements. The PMP and budget will continually be updated, as required. The PM must assure that the customer is an integral part of these processes and fully cognizant of his/her funding obligations.
- b. The PMP and budgeted requirements for all post award phases will be formulated to ensure delivery of a quality product, on time and within applicable funding constraints.
- (1). Realistic S&A budget requirements to produce a quality product are to be developed initially without regard to the flat rate income generated by the project. However, after roll-up

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and evaluation of all project and resident office budgets at the District level, adjustments and balancing of individual budgets may be required to meet MSC assigned S&A flat rate targets. Likewise, MSCs must evaluate and balance S&A requirements between districts to meet HQ assigned targets. If S&A income shortfalls cannot be balanced by excess income across the MSC, the MSC may request adjustments to assigned S&A targets based on extenuating circumstances.

- (2). The PMP and budget formulation for S&A and DDC will ensure: the contractor exercises his/her responsibilities to deliver quality construction materials and products in accordance with the contract plans and specifications; requirements for government approval of shop drawings are kept to a minimum pursuant to ER 415-1-10 and risk analysis; and adequate consideration is given to the costs of oversight of complex systems and commissioning requirements. To facilitate appropriate funding and charging practices, submittal registers should indicate if the review is chargeable to S&A or DDC. In addition, during the PMP and budget formulation processes, PMs need to consider the involvement of the appropriate USACE Technical Center of Expertise, the conduct of post completion inspection and fiscal closcout requirements, as well as future operation and maintenance of the facility.
- 4. P&D funds will be used for all pre-award activities up to and including construction contract award and provision of contract documents for field personnel. The PM must assure sufficient P&D funding is requested and available to fund construction personnel for their pre-award activities. For IDIQ and similar task order contacts, the initial preparation of each individual task order scope is a design function. After award of a construction or service contract, construction funds will be used. The Corps standard AIS systems CEFMS, PROMIS (in the future P2) and RMS will be used for reporting, tracking and managing project costs against budgets.

# 5. Policy on Design-Build Projects:

- a. P&D funds will be used for all activities, including preparation of the Request for Proposal, award of the design-build construction contract and reproduction of contract documents for construction personnel.
- b. After construction contract award, construction funds will be used for technical review of the contractor's design submittals and any further clarification of project scope, as required. The level of technical review and any post-award scope development or clarification will be coordinated with the customer throughout the PMP process and the estimated cost included in the project budget. The estimated cost for the government's review and resolution of scope issues, as required, will be included in the current working estimate (CWE) as a sub-element of the DDC line item in accordance with paragraph 8.a (3) below and charged to CEFMS work category code (cost account element) '2C002' Engineering and Design During Construction

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- Review of Contractor Design. Technical review of the contractor's design by district and field personnel will not be charged to S&A.
- c. Additional DDC funds for the applicable functions in paragraph 7 below will be provided as part of the award CWE consistent with the estimate in the approved PMP at time of award. Justification of any amount in excess of 0.3% of the direct construction contract amount will be required and critically reviewed by HQUSACE and/or the project proponent, as appropriate.
- d. The S&A rate for design-build contracts will be applied to the entire contract amount and contingencies to assure management and compliance with the contract specifications regarding design submittals, administration and normal S&A of construction.
- 6. S&A Functions: The following S&A functions are necessary to ensure compliance with contract plans, specifications and provisions, and will be charged to the appropriate MILCON or O&M flat rate account. Description of additional routine S&A functions is at Appendix A.
  - a. Review of contractor submittals labeled "For Information Only" (FIO).
  - b. Review of contractor submittals (shop drawings) requiring Government approval that are not an extension of design. Extension of design is defined as requiring a design analysis, plans and specifications.
  - c. Response to contractor requests for information (RFI) on construction issues. RFIs that are related to design intent or performance specifications prepared by an A-E that are unclear, must be responded to by the A-E firm at no additional cost to the Government pursuant to Standard Clause 52.236-23, Responsibilities of A-E Contractor. When similar circumstances apply to a design prepared by in-house personnel, DDC funds must be obtained to fund the in-house effort since the government is held harmless for its errors.
  - d. Site visits by in-house or contract personnel that are **not** related to the following: Request For Information (RFI) on unclear design or correction issues; unforeseen conditions that could not have been determined by prudent site investigation practices; and user requested changes, including operational and functional changes.
  - e. Testing to verify design assumptions that are **not** related to unforeseen conditions that could not have been determined by prudent site investigation practices and user requested changes, including operational and functional changes.
  - f. Review of deviations submitted by the contractor that vary from the construction contract specifications and plans.
  - g. Initial investigation of unknown conditions including differing site conditions to determine appropriate course of action.
  - h. Preparation of a modification for 'Suspension of Work' to accommodate design errors, changed conditions and mandatory changes in criteria, e.g., life, safety, etc.

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- i. Review of Value Engineering Contractor Proposals (VECPs).
- j. Preparation of contract modifications to change or accommodate Government Furnished Property requirements.
- k. Review of equipment for compliance with approved shop drawings for compatibility with existing systems.
- l. Involvement of the designer of record (A-E or In-house forces) in verifying and assuring compliance with the contact specifications and drawings.
- m. Initial investigation and documentation of potential A/E liability and damages will be charged to S&A. Thereafter, DDC or P&D funds approved and provided by the customer will be used for further investigation and pursuit of a A-E liability claim.
- n. Quality assurance functions (including contracted labor) on installation of specialized systems such as cathodic protection coatings, etc.
- o. Verifying contractor compliance with HVAC, communications and other complete system installation requirements for Commissioning and testing in accordance with the 'Unified Facilities Guide Specifications (UFGS)'. S&A funds will cover the cost of all government and contract personnel required for these activities. However, any additional, unique 'Commissioning and/or Testing Services' not covered by the UFGS are at the customers' discretion and can be provided when the customer has agreed to and funded the added contract costs from projects funds and Corps' costs from DDC. The additional Corps' post-award engineering costs for user requested commissioning and testing should be accounted for in the Award CWE as "Other Direct Costs without S&A" and well documented in the PMP.
- p. Partnering activities and ancillary agreements with the contractor to facilitate working relationships and deliver a quality product within budget and time constraints.
- q. Receipt of architectural finishes for customer approval.
- r. Resolution of contract disputes and claims, to include cost of Government personnel within the Corps' technical organizations. Other administrative costs and general and administrative staff will charge in accordance with ER37-2-10 and ER37-1-30.
- 7. DDC Functions and Funding: The following functions are extensions of design during construction. All in-house labor and/or contract charges to these DDC functions will be charged to the CEFMS work category code (accounting task code) '2C001' Engineering and Design During Construction to account for these costs. DDC funds will be provided as part of the award CWE consistent with the estimate in the approved PMP at time of award. Justification of any amount in excess of 0.5% of the direct construction contract cost will be required and critically reviewed by HQUSACE and/or the project proponent, as appropriate.
  - a. Preparation of designs to accommodate user requested operational and/or functional changes, including user changes in Government furnished property.

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- b. Preparation of designs and other design activities to overcome unknown site conditions that could not have been discovered under normal and prudent site inspection or testing.
- c. Correction of errors and/or omissions in contract specifications and drawings prepared by in-house forces. Correction of A-E error and omissions must be corrected by the A-E at no additional cost to the government based on A-E liability.
- d. Review and approval of contractor submittals (shop drawings) labeled for "Government Approval" that are an extension of design (design defined as requiring a design analysis, plans and specifications) for critical items required by the contract specifications that have customer concurrence and funding. The estimated cost for this effort shall be included in the PMP and Award CWE and updated, as required, after an appropriate cost/risk analysis to determine if these 'designs' should be accomplished in the pre-award or post-award phase. During the BCOE review, the project proponent, district office and field offices must thoroughly review the submittal register to eliminate government approval of non-critical submittals/shop drawings and assure that the registers minimize contractor submittals in accordance with ER 415-1-10. This requirement must be identified in the PMP during the design phase, coordinated with the customer for funding, and accounted for in the DDC line item in the award CWE.
- e. Preparation of O&M Systems Manuals for complex systems by designer (A/E or inhouse).
- f. Post-award engineering costs of Commissioning and Testing exceeding normal requirements specified in the UFGS and funded by the customer should be documented in the PMP, included in the project estimate and accounted for in the Award CWE as DDC.
- g. Expert witnesses and outside legal services which are used primarily to provide creditable and unbiased testimony to defend against contractor claims will not be charged to the flat rate S&A accounts. Customer approval of these "risk management" costs should be obtained before the government is committed to the cost.
- h. After the initial S&A effort to investigate and document A/E responsibility and liability, the follow-on costs incurred by the Government in pursuit of AE liability for damages on projects must be funded by the customer in accordance with their applicable procedures and tracked separately, regardless of the funding source. This will provide an audit trail and accounting for possible recovery of costs from the A-E.

# 8. Award Current Working Estimate (CWE) Elements and Reporting:

a. At project award, the project proponent will be notified of the Award CWE in accordance with current individual program and/or project proponent policies. The CWE shall include the following elements:

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# (1). Direct Costs:

- Estimated Construction Cost (ECC), i.e. direct contract costs for the primary and supporting facilities including design costs for design-build contracts.
- Additive/Optional/Alternative Bid Items
- Other Direct Costs with S&A (i.e. supporting contracts for GFM, utilities connections, payments to the BCE/DPW for contractor used utilities, etc.)
- (2). Other Direct Costs without S&A (i.e. category E & F equipment for medical facilities.)
- (3). Design During Construction (DDC) (no S&A to be applied) [CEFMS Accounting Task Code 2C000]
  - Required DDC Functions, other than review of contractor design for Design-Build (NTE 0.5% of direct construction costs for design-bid-build contracts and 0.3% of direct construction costs for design-build contracts.) [Charge to CEFMS Accounting Task Code - 2C001]
  - Review of Contractor Design for Design-Build Procurement (S&A funds will not be used for review). [Charge to CEFMS Accounting Task Code 2C002]
- (4). Preparation of O&M Manuals for complex systems.
- (5). Contingencies for unforeseen, operational and/or user changes. [Applied to 8.a.(1)]
- (6). Supervision & Administration (S&A) [Applied to 8.a.(1) + 8.a.(5).]
- b. The PM/PDT will update the PMP and project budget to reflect actual construction award costs and CWE elements and assure the data are reflected in PROMIS (in the future, P2) and RMS.
- 9. This policy will be updated as required. HQ points of contact for action are Mr. Phil Pinol, CEMP-MP, 202-761-1321; Mr. Phil Blount, CERM-P, 202-761-1267 and Mr. Stuart Houck, CECW-ET, 202-761-7775.

FOR THE COMMANDER:

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STEPHEN COAKLEY

Director of Resource

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CEMP-M/CERM-P 26 March 2003

#### APPENDIX A

# **ADDITIONAL ROUTINE S&A FUNCTIONS**

# USACE Policy for Construction Supervision and Administration (S&A) and Post-Award Engineering and Design Services

- 1. Additional Routine S&A Functions: The following additional post-award activities charged to S&A consist mainly of project and technical management, contract administration, and quality assurance (QA) activities. These activities occur from award to fiscal close out.
  - a. Reviews of insurance certification and bonding.
  - b. Preparation and execution of QA Plans.
  - c. QA sampling and testing of materials during construction (excluding sampling and testing to verify design assumptions) to determine suitability and compliance with plans and specifications; estimates of material/work quantities, including any required measurements or calculations by Government personnel.
  - d. QΛ/Quality Control (QC) Coordination Meetings.
  - e. Review of QC three-phase inspections and tracking of deficiencies. Quality verification/surveillance of contractor's QC system. Review of contractor's QC Reports and preparation of QA Reports. Inspections and surveys to ensure that construction is performed in compliance with plans and specifications, including verification of layouts, benchmarks, etc.
  - f. Pre-construction conferences after contract award.
  - g. Oversight of relocation, whether temporary or permanent, of building occupants.
  - h. Review, approval and enforcement of contractor submittals required by contract clauses, e.g., health and safety plan, demolition plan, submittal register, warranties, plans for environmental safeguards, etc.
  - i. Review and approval of construction schedules and progress charts/NAS prepared by construction contractors. Conferences with contractors to coordinate project features; enforcement of compliance with schedules.
  - j. Monitoring of compliance with submittal of SF 1413- Statement of Applicability of Contract Clauses to Sub-contractors.

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- k. Review and enforcement of contractor laboratory certifications.
- 1. Contract administration in association with modifications to contract.
- m. Labor interviews, reports, and other administrative cost efficiency measures.
- n. Management of contract funds and preparation of funds request.
- o. Management of contract schedules, progress charts, and reports.
- p. Review and processing of progress pay estimates and verification of bid item quantities.
- q. Processing of routine document transmittals.
- r. Preparation of construction contractor and final A/E performance evaluations.
- s. The cost and management of contracted S&I services, also called construction management services or Title II, whether contracted separately or performed by an A-E as part of his A-E contract.
- t. Performance of actions related to default or termination of a contractor.
- u. Obtaining or providing necessary technical guidance (i.e., technical manuals, standards, circulars, expert services, etc.) associated with contract compliance.
- v. Routine coordination among Corps personnel, project sponsor and user(s); when extraordinary effort is necessary, charges should be made to the DCC accounts rather than S&A.
- w. Verification of complete correction of final deficiency list (punch list).
- x. Pre-final and final inspections, and transfer of facilities to owner, with proper documentation e.g. DD Form 1354, Transfer of Real Property document.
- y. Completion and submission of ACASS and CCASS appraisals and documentation.
- z. Review of operation and maintenance manuals.
- aa. Photography/videotapes for reports.
- ab. Review of "as-built" drawings prepared by the construction contractor.

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- ac. Warranty enforcement, including four-and-nine-month inspections.
- ad. QA of site closure and post-construction maintenance.
- ae. Financial closeout of construction contract(s) and funding.
- 2. Questions concerning the above policy can be forwarded to Mr. Phil Pinol, CEMP-MP, 202-761-1321 or Mr. Phil Blount, CERM-P, 202-761-1267, for resolution.